No.



200300125

## THE CONTRED STRATES OF ANTERIOA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

# Monsanto Jechnology XXG

THETENS, THERE HAS BEEN PRESENTED TO THE

### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY PLANS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC PLENISHMENT OF VIBLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE SHIT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR STINGT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE URPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

#### SOYBEAN

'SE84950'

In Jestimonn Thereof, I have hereunto set my hand and caused the seal of the Plant Inviern Protection Office to be affixed at the City of Washington, D.C. this fourth day of Tebruary, in the year two thousand and five.

Altest:

Bem 3

Commissioner Plant Variety Protection Office Agricultural Marketing Service of Agriculturo

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7.11.S.C. 2421). Information is held confidential until certificate is issued (7.11.S.C. 2428).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

NAME OF OWNER     Monsanto Technology LLC			2. TEMPORARY DESIGNA EXPERIMENTAL NAME CHH5401B0R	TION OR	3. VARIETY NAME SE84950
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Co	ountry)		5. TELEPHONE (include an	ea code)	FOR OFFICIAL USE ONLY
634 E. Lincoln Way Ames, IA 50010	, 1879 a di wang	and the second	(515) 232-717	0	POONNERS OO 1
Ames, IA 50010		til skrivitski	6. FAX (include area code)		
			(515) 232-69	05	FILING DATE
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.)	8. IF INCORPOR STATE OF INC	ATED, GIVE CORPORATION	9. DATE OF INCORPORAT	ION	2/4/2003
Limited Liability Company		N			Approximately
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN T	THIS APPLICATION. (F.	irst person listed will re	ceive all papers)	election was	FILING AND EXAMINATION FEES:
Donald Steffen 634 E. Lincoln Way Ames, IA 50010	eritorio de estables. Por estables de la companio del companio della companio del				\$ 2,705.00 E DATE 2/4/2003
<ul> <li>Substitution of the substitution of the substitution</li></ul>			Albertanes National		certification fee:
					DATE 10/12/04
11. TELEPHONE (Include area code) 12. FAX (Include area code)	13. E-N	IAIL		14. CROP	KIND (Common Name)
(515) 956-3002 (515) 232-6905	don	ald.e.steffen@	monsanto.com		Soybean
15. GENUS AND SPECIES NAME OF CROP Glycine max (L.) Merr.	20 May 10 Apr 46	AILY NAME (Botanical		HYBRID?	E VARIETY A FIRST GENERATION  YES NO
18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Folio	ow instructions on	19. DOES THE O	WNER SPECIFY THAT SEED	OF THIS VAR	RIETY BE SOLD AS A CLASS OF
reverse)  a.   Exhibit A. Origin and Breeding History of the Variety		CERTIFIED S	SEED? See Section 83(a) o	f the Plant Va	
b. 🕶 Exhibit B. Statement of Distinctness	Paragram syafar standing		and 21 below)		NO (II no, go to item 22)
c. 😽 Exhibit C. Objective Description of Variety	医克勒特氏炎		WNER SPECIFY THAT SEED LIMITED AS TO NUMBER OF		YES NO
d. Exhibit D. Additional Description of the Variety (Optional)		IF YES, WHIC	H CLASSES? FOUND	ATION []	REGISTERED CERTIFIED
e. Exhibit E. Statement of the Basis of the Owner's Ownership					
<ul> <li>f. Voucher Sample (2,500 viable untreated seeds or, for tuber propage verification that tissue culture will be deposited and maintained in an repository)</li> </ul>	n approved public	LIMITED AS T	WNER SPECIFY THAT THE CONUMBER OF GENERATION	IS?	YES NO
g. Filing and Examination Fee (\$2,705), made payable to "Treasurer of States" (Mail to the Plant Variety Protection Office)		IF YES, SPECI NUMBER 1, 2, (If additional ex			REGISTERED CERTIFIED e indicated on the reverse.)
22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBF FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR US OTHER COUNTRIES?			TY OR ANY COMPONENT OF IGHT (PLANT BREEDER'S RI		Y PROTECTED BY INTELLECTUAL ENT)?
☐ YES ☑ NO		<b>▼</b> YES	North Color (Indiana) (Indiana) Taranggan	N	<b>(0</b> - 1 - 1, 1
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, T FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space inc	TRANSFER, OR USE	IF YES, GIVE O	COUNTRY, DATE OF FILING O	R ISSUANCE	E AND ASSIGNED
The owners declare that a viable sample of basic seed of the variety will be fur for a tuber propagated variety a tissue culture will be deposited in a public rep					······································
The undersigned owner(s) is(are) the owner of this sexually reproduced or tube and is entitled to protection under the provisions of Section 42 of the Plant Var Owner(s) is(are) informed that false representation herein can jeopardize protection.	er propagated plant var riety Protection Act.	iety, and believe(s) tha			
SIGNATURE OF OWNER		SIGNATURE OF O	WNER		
NAME (Please print or type)		NAME (Please print	t or type)		***
Donald Steffen					
CAPACITY OR TITLE Oilseeds IP/Reg. Affairs Manager	un 2003	CAPACITY OR TITI	LE .		DATE
%T-470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0	0a. Replaces STD-470	(02-99) which is obso	lete. (See reverse for ins	tructions and	information collection burden statement)

#### INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320 filing fee and \$2,385 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

> **Plant Variety Protection Office** Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvp.htm

#### ITEM

18a Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
  - (1) identify these varieties and state all differences objectively:
  - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
  - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 21. See Section 83 of the Act for the Contents and Term of Plant Variety Protection.
- See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)
- 23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)
- U.S. Patent No. 5,776,760. Issue Date: July 7, 1998. Assignee: Monsanto Company. Patent Application No. 484,274.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

O9V9- SMA-AQ**SU** To avoid conflict with other variety names in use, the applicant must check the Variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center--East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed/ls-sd.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, or marital or family status, (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

S&T-470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (02-99) which is obsolete.

## MONSANTO TECHNOLGY LLC PVP APPLICATION - **SE84950**

### **EXHIBIT A**

### ORIGIN AND BREEDING HISTORY

1996 - Final cross was made in 1996 at Isabela, Puerto Rico.

Parentage: H4994RR//Hutheson/H4994RR

Hukheson" (B1: 7/23/2003)
Source of glyphosate tolerance is H4994RR = (P5482/A5474)\*4//H4464\*4/40-3-2

1997 - F1 generation was grown at Isabela, Puerto Rico and advanced using modified single seed descent.

1997 - F2 generation was grown at Stuttgart, Arkansas and advanced using modified single seed descent.

1998 – F3 bulk populations were grown at Isabela, Puerto Rico and single plants pulled.

1998 – F3 derived F4 plants were grown at Stuttgart, Arkansas in progeny rows and variety SE84950 was selected for lodging, general plant disease reaction to SCN, BSL, White mold, SIS (BT: 7123/2003) per applicants authorization).

1999 - F3:5 breeder seed was grown at Haubstadt, Indiana for progeny row and for yield tests at 1 location.

Variety SE84950 was observed to be uniform and stable for the characteristics described within this application based on our observations since 1999 and, henceforth, to present. No variants were observed during this time.

Variety SE84950 has continued to be grown in yield tests at 9 locations in 2000 and 24 locations in 2001 for comparison against other varieties to determine how it would be used in our marketing program.

## MONSANTO TECHNOLGY LLC PVP APPLICATION - SE84950

### EXHIBIT B

### **NOVELTY STATEMENT**

To our knowledge, the soybean varieties that closely resemble SE84950 are 05744540, and 0053840:

1. Pod Wall color	SE84950	- Brown
	05744540	- Tan
	0053840	- Brown
2. Hilum color	SE84950	- Black
	05744540	- Brown
	0053840	- Black
3. Plant Habit	SE84950	<ul> <li>Determinate</li> </ul>
	05744540	- Determinate
	0053840	- Indeterminate

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705 EXHIBIT C (Soybean)

# OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max (L.) Merr.)

NAME OF APPLICANT(S)	Monsanto Technology	LLC	Transition of the control of the con	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or R.F.	D. No., City, State, and ZIP Code)		2 C C C C C C C C C C C C C C C C C C C	200300125
	634 E. Lincoln Way Ames, IA 50010			VARIETY NAME SE84950
			<del>-</del> ,	TEMPORARY OR EXPERIMENTAL DESIGNATIO  CHH5401B0R
PLEASE READ ALL INSTR	UCTIONS CAREFULLY: Place the ap	propriate number that describ	es the varietal character of thi	is variety in the boxes below.
Place a zero in the first box (e	.g. 099 or 09 ) when num	ıber is either 99 or less or 9 or	less respectively. Data for qu	antitative
plant characters should be ba	sed on a minimum of 100 plants. Comp	arative data should be determ	ined from varieties entered in	the same trial. Royal
Horticultural Society or any r	ecognized color standard may be used to	o determine plant colors; design	nate system used:	
	r your variety; lack of response may del	ay progress of your application	1.	
A. MORPHOLOGY				
Seed Shape:	÷			
3 = Elon	T, and $T/W$ ratios $< 1.2$ )	(L/W ratio 4 = Elonga	cal-Flattened > 1.2; L/T ratio < te-Flattened > 1.2;T/W ratio > 1	•
Seed Coat Color:	•			
1 1 = Yello	ow 2 = Green	3 = Brown	4 = Black	5 = Other (Please Specify)
Seed Coat Luster:	•		•	
1 1 = Dull	2 = Shiny			
Seed Size:				
1 3 . 7 g	rams/100 seeds			
H <u>ilum C</u> olor:		•		
6 1 = Buff 6 = Black		3 = Brown see Specify)	4 = Gray	5 = Imperfect Black
Cotyledon Color:				
$1 \qquad 1 = Yello$	$\mathbf{v}$ $2 = \mathbf{Green}$			

### A. MORPHOLOGY (Continued)

**Seed Protein Peroxidase Activity:** 

0 1 = Low 2 = High

200300125

Hypocotyl Color:

2 1 = Green
'Evans' or 'Davis'

2 = Green with Bronze Bands below Cotyledon 'Woodworth' or 'Tracy'

3 = Light Purple below Cotyledons 'Beeson' or 'Pickett 71' 4 = Dark Purple extending to unifoliolate leaves ('Hodgson', 'Coker', or 'Hampton 266A')

Leaf Shape:

$$3 = Ovate$$

Flower Color:

2 = Purple

3 = White with a Purple Throat

**Pod Color:** 

2 = Brown

3 = Black

**Pubescence Color:** 

2 = Brown (Tawny)

3 = Light Tawny

Plant Habit:

4 = Intermediate

**Maturity Group:** 

$$2 = 00$$
$$7 = IV$$
$$12 = IX$$

$$3 = 0$$
$$8 = V$$
$$13 = X$$

$$4 = I$$
$$9 = VI$$
$$14 = XI$$

5 = II 10 = VII 15 = XII

Maturity Subgroup:

Please enter a value from 0 - 9

**B. DISEASE REACTIONS** 

0 = Not Tested

1 = Susceptible

2 = Resistant

3 = Tolerant

**Bacterial** 

Bacterial Pustule (Xanthomonas campestris pv. glycines (Nakano) Dye)

Bacterial Blight (Pseudomonas syringae pv. glycinea (Coerper) Young, Dye, & Wilkie)

0 Wildfire Blight (Pseudomonas syringae pv. tabaci (Wolf & Foster) Young, Dye, & Wilkie)

Fungal

0 Brown Spot (Septoria glycines Hemmi)

В.	DI	SEASE REAC	TIONS (Continu	ed)	0 = Not Tested	1 =	Susceptible	2 = Resistar	at $3 = T$	olerant
_		Frogeye Leaf	f Spot (Cercospor	a sojine	a Hara)			<b>9</b> A	<u> </u>	012
	0	race 1		0	race 2		0 race	<b>2 0</b>	0	race 4
	0	race 5		0	race 6		Othe	r ( <i>Please Specif</i> j	")	·
	0	Target Spot (	(Corynespora cas	siicola (	Berk. & Curt.)	Wei)				
,	0	Downey Mild	lew ( <i>Peronospora</i>	trifolio	rum var. mancl	hurica (Na	aum.) Syd. ex	Gäum)		
	0	Powdery Mile	dew ( <i>Microsphae</i>	ra diffu	sa Cke. & Pk.)					
	0	Brown Stem	Rot ( <i>Phialophora</i>	gregat	a (Allington & C	Chamberla	nin) W. Gams	.)		
	3	Stem Canker	(Diaporthe phase	olorum	(Cke. & Ell.) S	acc. var.	caulivora Ath	ow & Caldwell)		
	0	Pod and Stem	a Blight ( <i>Diaporti</i>	he phas	eolorum (Cke. &	z Ell.) Sac	c. var. <i>sojae</i> (	(Lehman) Wehr	n.)	
	0	Purple Seed S	Stain (Cercospora	kikuch	ii (T. Matsu. &	Tomoyas	u) Gardener)			•
	0	Rhizoctonia F	Root Rot (Rhizoct	onia so	lani Kühn)		·			
Phy	topl	hthora Root Ro	ot (Phytophthora	megasţ	erma Drechs. f.	sp. glycin	ea (Kuan & I	Erwin))		
	1	race 1	1 race 8	$\vdash$	1 race 15	1 1	race 22			
	1	race 2	1 race 9		1 race 16		race 23			
	1	race 3	1 race 10		1 race 17		race 24		÷	
$\vdash$	1	race 4	1 race 11 1 race 12		1 race 18		race 25		•	
	1	race 5	1 race 12 1 race 13		1 race 19 1 race 20		ace 26 Other ( <i>Please</i>	Specify) .		
	1	race 7	1 race 14		1 race 21	· · · · · · · · · · · · · · · · · · ·	Series (1 rease			
	0	Bud Blight (To	obacco Ringspot	Virus)						
	0	Yellow Mosaid	: (Bean Yellow M	Iosaic \	Virus)					
	0	Cowpea Mosa	ic (Cowpea Chlo	rotic V	irus)	·				
	0	Pod Mottle (B	ean Pod Mottle V	Virus)						

в. D	ISEASE REACTIONS (	Continuea)	0 = Not Te	estea	I = Susceptible	e 2 = Resistar	1t 3 = 1	oleran	į
0	Seed Mottle (Soybean	Mosaic Viru	s)						
Nema	tode					2	003	00'	12
Soybe	an Cyst Nematode (Hete	erodera glycin	es Ichinohe)						
0	race 1	race 4	0	race 9					
0	race 2	race 5	1	race 14	(former r. 4)				
3	race 3	race 6		Other (1	Please Specify) _				
0	Lance Nematode (Hop	ololaimus colu	umbus Sher)			·			
2	Southern Root Knot N	Nematode ( <i>Me</i>	eloidogyne inc	ognita (Ko	ofoid & White)	Chitwood)			
0	Northern Root Knot N	Nematode (Me	eloidogyne haj	ola Chitwo	ood)				
0	Peanut Root Knot Ner	matode ( <i>Melo</i>	idogyne arena	ıria (Neal)	Chitwood)				
0	Reniform Nematode (A	Rotylenchus r	eniformus Lin	wood & (	Olivera)				
0	Javanese Nematode (A	Aeloidogyne jo	avanica (Treu	b) Chitwo	od)				
	Other Nematode ( <i>Plea</i>	se Specify) _			······				
C. PH	IYSIOLOGICAL RESP	ONSES	0 = Not Te	sted	l = Susceptible	2 = Resistan	t = 3 = T	olerant	·.
0	Iron Chlorosis on Calo	careous Soil							
0	Phosphorus			•			· .		
0	Boron		•				4		
0	Aluminum			·					al a
0	Aluminum		 215						u"
0			 						

D. INSECT REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant	3 = Tolera	ant
0 Mexican Bean Beetle (Epilachna va.	rivestis Mulsant)			·	
0 Potato Leaf Hopper (Empoasca fab.	ae (Harris))		200	3001	25
Other (Please Specify)					
E. HERBICIDE REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant		
2 Metribuzin					
0 Bentazone					•
1 Sulfonylurea					
2 Glyphosate		·			
1 Glufosinate					. 1
0 Pendimethalin					
Other (Please Specify)					
F. TRANSGENIC COMPOSITION					
Has the development of the Subject Variety If yes, please complete the following informa 1. Please state the vector's name: 2. Please state the vector components:		_	<b> </b>	YES	NO
<ul><li>3. Please describe the genetic material succ</li><li>4. Please describe the insertion protocol:</li></ul>	essfully transferred	into the Subject Vari	iety:	•	
* A literature citation(s) explaining the for the "Transgenic Composition" portion of	_	nests above may be an	acceptable altern	native to com	ipletion of
U.S. Patent No. 5,776,760. Issue Date: Jul Monsanto Company. Patent Application No.	-	or: Barry, Gerard, an	d Kishore, Gane	sh. Assigne	e:
ABSTRACT: Genes encoding a glyphosate of transformed bacteria and plants which degrateristics.	oxidoreductase enzy				

### G. BIOCHEMICAL MARKERS

Please describe any biochemical information here which you believe will be helpful in further describing the Subject Variety (e.g. Simple Sequence Repeats, Restriction Fragment Length Polymorphisms, Isozymic Characterization). Use additional pages if necessary.

H. COMMENTS

MONSANTO TECHNOLGY LLC PVP APPLICATION - SE84950

### **EXHIBIT D**

### ADDITIONAL DESCRIPTION OF INVENTION

SE84950 is a mid maturity group V variety with resistance to Roundup <sup>tm</sup> herbicide. It has very high yield potential. It has superior yields to lines of similar maturity and has excellent agronomic characteristics, including lodging resistance. In tests, it has beaten Syngenta NKS53-Q7 by 110 % overall, winning at 15 of 25 locations. It is adapted to the mid maturity group V growing areas of Kansas, Oklahoma, Arkansas, Kentucky, Tennessee, North Carolina, Virginia, and Missouri. It has below average appearance.

REPRODUCE LOCALLY. Include form number and edition date on all reproduc	tions.	FORM APPROVED - OMB No. 0581-0058
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE  EXHIBIT E  STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to del certificate is to be issued (7 U.S.C. 2 confidential until the certificate is issued.	421). The information is held
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION	3. VARIETY NAME
Monsanto Technology LLC	OR EXPERIMENTAL NUMBER CHH5401B0R	SE84950
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)
634 E. Lincoln Way Ames, IA 50010	(515) 232-7170	(515) 232-6905
	7. PVPO NUMBER 2 0 0 3	00125
8. Does the applicant own all rights to the variety? Mark an "X" in t	the appropriate block. If no, please exp	lain. YES NO
9. Is the applicant (individual or company) a U.S. National or a U.S	. based company? If no, give name of	country. X YES NO
10. Is the applicant the original owner?	NO If no, please answer one o	f the following:
	NO If no, give name of country  i), is (are) the original owner(s) a U.S. ba  NO If no, give name of country	y sed company?
11. Additional explanation on ownership (If needed, use the reverse	for extra space):	
PLEASE NOTE:		THE RESIDENCE OF THE PARTY OF T
Plant variety protection can only be afforded to the owners (not licen	sees) who meet the following criteria:	
<ol> <li>If the rights to the variety are owned by the original breeder, that p national of a country which affords similar protection to nationals of</li> </ol>	person must be a U.S. national, national of the U.S. for the same genus and spec	of a UPOV member country, or ites.
<ol><li>If the rights to the variety are owned by the company which emplo nationals of a UPOV member country, or owned by nationals of a genus and species.</li></ol>		
3. If the applicant is an owner who is not the original owner, both the	original owner and the applicant must n	neet one of the above criteria.
The original breeder/owner may be the individual or company who di Act for definitions.	irected the final breeding. See Section 4	11(a)(2) of the Plant Variety Protection
According to the Paperwork Reduction Act of 1995, an agency may no conduct or sponsor, control number. The valid OMB control number for this information collection is 0581-0055 response, including the time for reviewing the instructions, searching existing data sources,	<ul> <li>The time required to complete this information colle</li> </ul>	ction is estimated to average 6 minutes per
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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or cell (202) 720-5964 (volce and TDD). USDA is an equal opportunity provider and employer.